

STN	Vysokofrekvenčné konektory Časť 64: Rámcová špecifikácia vysokofrekvenčných koaxiálnych konektorov s vnútorným priemerom vonkajšieho vodiča 0,8 mm, charakteristická impedancia 50 Ω (typ 0,8)	STN EN IEC 61169-64 35 3811
------------	---	---

Radio-frequency connectors - Part 64: Sectional specification - RF coaxial connectors with 0,8 mm inner diameter of outer conductor - Characteristic impedance 50 (type 0,8)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/26

Obsahuje: EN IEC 61169-64:2025, IEC 61169-64:2025

Oznámením tejto normy sa od 30.11.2028 ruší
STN EN IEC 61169-64 (35 3811) z apríla 2020

142145

EUROPEAN STANDARD

EN IEC 61169-64

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2025

ICS 33.120.30

Supersedes EN IEC 61169-64:2019

English Version

**Radio-frequency connectors - Part 64: Sectional specification -
RF coaxial connectors with 0,8 mm inner diameter of outer
conductor - Characteristic impedance 50 Ω (type 0,8)
(IEC 61169-64:2025)**

Connecteurs pour fréquences radioélectriques - Partie 64:
Spécification intermédiaire - Connecteurs RF coaxiaux avec
un conducteur extérieur d'un diamètre intérieur de 0,8 mm -
Impédance caractéristique de 50 Ω (type 0,8)
(IEC 61169-64:2025)

Hochfrequenz-Steckverbinder - Teil 64:
Rahmenspezifikation für koaxiale HF-Steckverbinder mit 0,8
mm Innendurchmesser des Außenleiters -
Wellenwiderstand 50 Ω (Typ 0,8)
(IEC 61169-64:2025)

This European Standard was approved by CENELEC on 2025-11-26. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 61169-64:2025 (E)**European foreword**

The text of document 46F/721/FDIS, future edition 2 of IEC 61169-64, prepared by SC 46F "RF and microwave passive components" of IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61169-64:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-11-30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-11-30 document have to be withdrawn

This document supersedes EN IEC 61169-64:2019 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61169-64:2025 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61169-1	2013	Radio frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013



IEC 61169-64

Edition 2.0 2025-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Radio-frequency connectors -
Part 64: Sectional specification - RF coaxial connectors with 0,8 mm inner
diameter of outer conductor - Characteristic impedance 50 Ω (type 0,8)**

**Connecteurs pour fréquences radioélectriques -
Partie 64: Spécification intermédiaire - Connecteurs RF coaxiaux avec un
conducteur extérieur d'un diamètre intérieur de 0,8 mm - Impédance
caractéristique de 50 Ω (type 0,8)**



THIS PUBLICATION IS COPYRIGHT PROTECTED
Copyright © 2025 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

IEC Secretariat
 3, rue de Varembe
 CH-1211 Geneva 20
 Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search -

webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee, ...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Discover our powerful search engine and read freely all the publications previews, graphical symbols and the glossary. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 500 terminological entries in English and French, with equivalent terms in 25 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Recherche de publications IEC -

webstore.iec.ch/advsearchform

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études, ...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

IEC Just Published - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et une fois par mois par email.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Découvrez notre puissant moteur de recherche et consultez gratuitement tous les aperçus des publications, symboles graphiques et le glossaire. Avec un abonnement, vous aurez toujours accès à un contenu à jour adapté à vos besoins.

Electropedia - www.electropedia.org

Le premier dictionnaire d'électrotechnologie en ligne au monde, avec plus de 22 500 articles terminologiques en anglais et en français, ainsi que les termes équivalents dans 25 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

IEC 61169-64:2025 © IEC 2025

CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Mating face and gauge information	6
4.1 Material	6
4.2 Reference position	6
4.3 Datum system	6
4.4 Dimensions – High performance connector – Grade 1	6
4.4.1 Connector with pin centre contact – Grade 1	6
4.4.2 Connector with socket centre contact – Grade 1	7
4.5 Dimensions – Standard test connector – Grade 0	9
4.5.1 Connector with pin centre contact – Grade 0	9
4.5.2 Connector with socket centre contact – Grade 0	10
4.6 Optional design of coupling nut	11
4.7 Gauging of socket centre contacts	11
4.7.1 Gauge pins	11
4.7.2 Test sequence	12
5 Quality assessment procedures	12
5.1 General	12
5.2 Ratings and characteristics	12
5.3 Test schedule and inspection requirements	14
5.3.1 Acceptance tests	14
5.3.2 Periodic tests	14
5.4 Procedures for quality conformance	14
5.4.1 Quality conformance inspection	14
5.4.2 Quality conformance and its maintenance	14
6 Instructions for preparation of detail specifications	14
6.1 General	14
6.2 Identification of the component	14
6.3 Performance	14
6.4 Marking, ordering information and related matters	14
6.5 Selection of tests, test conditions and severities	14
6.6 Blank detail specification pro-forma for type 0,8 connectors	14
7 Marking	15
7.1 Marking of component	15
7.2 Marking and contents of package	15
Bibliography	16
Figure 1 – Connector with pin centre contact – Grade 1	7
Figure 2 – Connector with socket centre contact – Grade 1	8
Figure 3 – Connector with pin centre contact – Grade 0	9
Figure 4 – Connector with socket centre contact – Grade 0	10
Figure 5 – Optional design of coupling nut	11
Figure 6 – Gauge pin for socket centre contact	11

IEC 61169-64:2025 © IEC 2025

Table 1 – Dimensions of connector with pin centre contact – Grade 1.....	7
Table 2 – Dimensions of connector with socket centre contact – Grade 1	8
Table 3 – Dimensions of connector with pin centre contact – Grade 0.....	9
Table 4 – Dimensions of connector with socket centre contact – Grade 0	10
Table 5 – Dimensions of gauge pins for socket centre contact	11
Table 6 – Ratings and characteristics	12

IEC 61169-64:2025 © IEC 2025

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Radio-frequency connectors -
Part 64: Sectional specification -
RF coaxial connectors with 0,8 mm inner diameter of outer conductor -
Characteristic impedance 50 Ω (type 0,8)**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61169-64 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) upgrading of the inferior connector class to a grade 1 "high performance connector";
- b) alignment of the mating face dimensions as well as the ratings and characteristics with the precision 0,8 mm connectors specified in the IEEE 287.1-2021 and IEEE 287.3-2021 standards;

IEC 61169-64:2025 © IEC 2025

- c) figures: true-to-scale design; change of datum system for tolerances; introduction of an additional dimension;
- d) gauge pins: correction of dimensions and test procedures;
- e) simplification of the clauses on quality assessment (Clause 5), preparation of a detail specification (Clause 6), and marking (Clause 7) by making direct reference to the generic specification IEC 61169-1;
- f) introduction of an optional design for the coupling nut.

The text of this International Standard is based on the following documents:

Draft	Report on voting
46F/721/FDIS	46F/729/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 61169 series, published under the general title *Radio-frequency connectors*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

IEC 61169-64:2025 © IEC 2025

1 Scope

This part of IEC 61169, which is a sectional specification (SS), provides information for the preparation of detail specifications (DS) for coaxial connectors with 0,8 mm inner diameter of the outer conductor, characteristic impedance of 50 Ω , and with screw coupling. These connectors are referred to below as type 0,8 connectors. They are used in telecommunications technology as well as in test and measurement applications for operating frequencies up to 145 GHz.

This document describes mating face dimensions for high performance connectors (grade 1) and standard test connectors (grade 0), gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to type 0,8 connectors.

This document indicates the recommended performance characteristics to consider when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

NOTE Dimensions are in mm. All un-dimensioned pictorial configurations are for reference purposes only.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61169-1:2013, *Radio-frequency connectors - Part 1: Generic specification - General requirements and measuring methods*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN